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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,691	11/02/2007	Sachiko Miyagawa	920_098	2318
25191	7590	10/22/2010	EXAMINER	
BURR & BROWN			LAVARIAS, ARNEL C	
PO BOX 7068			ART UNIT	
SYRACUSE, NY 13261-7068			PAPER NUMBER	
			2872	
			MAIL DATE	
			DELIVERY MODE	
			10/22/2010	
			PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/594,691

**Applicant(s)**

MIYAGAWA ET AL.

**Examiner**

Amel C. Lavarias

**Art Unit**

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/22/10, 8/16/10.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) 2 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 3-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/22)  
Paper No(s)/Mail Date 8/16/10  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendments to the specification and abstract of the disclosure in the submission filed 9/22/10 are acknowledged and accepted.
2. The amendments to Claims 1, 3-5 in the submission filed 9/22/10 are acknowledged and accepted. In view of these amendments, the objections to the claims in Section 10 of the Office Action dated 3/26/10 are respectfully withdrawn.
3. The addition of Claims 6-7 in the submission filed 9/22/10 is acknowledged and accepted.

### ***Response to Arguments***

4. The Applicant argues that a certified copy of the priority document was timely furnished during the PCT stage, and thus Applicant is not required to again file the certified copy in the instant application. The Examiner disagrees. Though a certified copy of the priority document might have been timely filed during the PCT stage, a copy of that certified copy of the priority document must still be present in the instant application for the foreign priority claim to be valid and fulfilled. No such copy was found in the instant application. See MPEP 201.14(b).
5. With regard to the objections to the specification due to a substitute specification, the Examiner mistakenly viewed the submission of a verified English translation of the

instant application to be a submission of a substitute specification. The objections to the specification in Section 6 of the Office Action is respectfully withdrawn.

6. The Applicant's arguments with respect to Claims 1, 3-5 have been considered but are moot in view of the new ground(s) of rejection.
7. Claims 1, 3-7 are now rejected as follows.

***Priority***

8. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 3/31/04. It is noted, however, that applicant has not filed a copy of the certified copy of the 2004-108378 application as required by 35 U.S.C. 119(b).

***Specification***

9. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. *It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.*

10. The abstract of the disclosure is objected to because of the following informalities:  
Abstract, line 1- delete 'is provided that'.

Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 4, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al. (WO 2004/000550 A1), of record.

Fukuda et al. discloses an antireflection film (See for example Abstract; Page 18, lines 5-20) comprising a transparent base material film (See for example Page 22, lines 12-22; Page 26, line 8-Page 29, line 12) and, provided on the transparent base material film in the following order, an antistatic hardcoat layer (See for example primer/hardcoat layer, Page 46, line 18-Page 50, line 16; Page 37, line 15-Page 38, line 4) comprising an antistatic agent (See for example primer and added conductive material in hardcoat layer, Page 37, lines 15-24; Page 50, lines 7-16) and an ionizing radiation curing resin (See for example Page 39, lines 9-18; Page 47, lines 1-6), the antistatic agent being selected from polymeric antistatic agents, such as a quaternary ammonium cation-containing structure, crosslinking group-containing low-molecular antistatic agents, and electrically conductive antistatic agents (See for example Page 37, lines 15-24; Page 50, lines 7-16, wherein polymeric antistatic agents may include a quaternary ammonium cation-containing structure and electrically conductive antistatic agents may include metal oxide

particles), the antistatic hardcoat layer having a micron-order thickness, such as between 1-5 microns (See for example Page 51, lines 9-22; Example 9A in Table 3, where the thickness of the antistatic hard coat layer may be 5 microns), and a low-refractive index layer (See for example Page 52, line 24-Page 53, line 12; Page 57, line 18-Page 58, line 22) having a lower refractive index than an underlying layer in direct contact with the low-refractive index layer, wherein an absolute value of a difference in refractive index between the transparent base material film and the antistatic hardcoat layer is not more than 0.03, whereby an occurrence of interference fringes is prevented (See for example Page 34, lines 12-22; Example 9A in Table 3, wherein for an antistatic hard coat layer thickness of 5 microns, no interference spots were observed).

*Claim Rejections - 35 USC § 103*

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. in view of Matsufuji et al. (U.S. Patent Application Publication US 2004/0077752 A1), of record.

Fukuda et al. discloses the invention as set forth above in Claim 1, except for the polymeric antistatic agent being a molecule crosslinking group-containing compound. However, Matsufuji et al. teaches that antistatic layers may be formed in a film using either a conductive metal oxide or a conductive polymer. As examples of conductive polymers, Matsufuji et al. teaches that conductive polymers made of organic electron-conducting materials, such as polyaniline derivatives, polythiophene derivatives, polypyrrole derivatives, and polyacetylene derivatives, may be utilized in the antistatic layers. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the polymeric antistatic agent be a molecule crosslinking group-containing compound, as taught by Matsufuji et al., in the antireflection film of Fukuda et al., to allow the antistatic layer to maintain high adhesiveness to the underlying layer while providing for appropriate conductivity for antistatic functionality.

16. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. in view of Ono et al. (U.S. Patent Application Publication US 2003/0158309 A1), of record.

Fukuda et al. discloses the invention as set forth above in Claim 1, and further discloses that, when tested, the haze of the film be less than 50%, and preferably be less

than 3% (See for example Page 28, lines 4-16). However, Fukuda et al. does not explicitly disclose a difference in haze between before and after the antireflection film is placed in an environment of temperature 80°C and humidity 90% for 500 hr is not more than 3. However, Ono et al. teaches a resin film composition (See for example Abstract) that is tested for resistance to moisture and heat. In particular, Ono et al. teaches that the resin film is tested in an environment of 65 degrees C and 85% humidity over a period of 500 hours, wherein the haze values before and after the test are determined and a difference in haze value is recorded (See for example Paragraph 0221; Tables 10-14). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a difference in haze between before and after the antireflection film is placed in an environment of temperature 65°C and humidity 85% for 500 hr is not more than 3, as taught by Ono et al., in the film of Fukuda et al., to assure that the film does not become cloudy or opaque after exposure to high heat or moisture. Though the combined teachings of Fukuda et al. and Ono et al. do not explicitly disclose the test being performed at 80 degrees C and 90% humidity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the test be performed at 80 degrees C and 90% humidity, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the test be performed at 80 degrees C and 90% humidity, so as to expose the film to more realistic conditions in which the film will be



actually operating in, thus obtaining a better understanding of how the film will react in its environment. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235.

17. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. in view of Rose et al. (EP 0845489A2).

Fukuda et al. discloses the invention as set forth above in Claim 1, except for the antistatic agent containing 1-70 mol% of a quarternary ammonium cation-containing salt. However, Rose et al. teaches a conventional antistatic material for use in plastics (See for example Abstract), wherein the antistatic material utilized in the composition includes a quarternary cation-containing salt in the amount of 0-30 mol% (See for example Abstract; Page 3; Equation I). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the antistatic agent in the antireflection film of Fukuda et al., contain 1-70 mol% of a quarternary ammonium cation-containing salt, as taught by Rose et al., to provide an antistatic layer that is long-lasting, scratch-proof, that exhibits good adhesion, and that provides adequate amount of electrical conduction appropriate for antistatic functionality.

***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 10:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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10/14/10

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